

BUSE et al.
Serial No. 09/494,401
Amendment dated January 30, 2004
Response to Office Action dated October 31, 2003

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application. By the present amendment, claims 1-3, 7 and 9-12 are amended, new claim 13 is added, and claims 4-6 and 8 are canceled without prejudice or disclaimer as to the subject matter contained therein.

Listing of Claims:

Claim 1. (*Currently Amended*) A method of allocating an internet protocol address to a device connected to a packet-based communication network, comprising:

 placing on the network an interrogation in the form of a first control frame from a proxy, said proxy being separate from said device;

 receiving at the proxy a response from said device in the form of a second control frame which defines an invalid internet protocol address for said device; **and**

 in response to said invalid internet protocol address, sending from the proxy to a separate server a request for an internet protocol address for said device; and

 sending from the proxy to said device a third control frame which includes an a valid internet protocol address allocated to said device.

Claim 2. (*Currently Amended*) A method according to claim 1 further comprising:

 in response to the reception of said second control frame by said proxy, operating said proxy to test potential internet protocol addresses for conflict with existing

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internet protocol addresses, and obtaining said valid internet protocol address when conflict thereof with existing internet protocol addresses is absent.

Claim 3. (*Currently Amended*) A method according to claim 2 further comprising operating said proxy to obtain ~~an~~ said valid internet protocol address for said device by at least one of steps (a) to (c) as follows:

- (a) by means of a said request addressed according to a dynamic host communication protocol;
- (b) automatic private internet protocol addressing; and
- (c) manual entry of the internet protocol address,

wherein said steps (a) to (c) are performed in the order (a), (b) and (c) until said valid internet protocol address is obtained.

Claims 4-6. (*Canceled*)

Claim 7. (*Currently Amended*) A method of allocating an internet protocol address to a device connected to a packet-based communication network in which devices connected to the network communicate by means of frames each including a media access control address and an internet protocol address and in which there are a proxy for said device and a server separate from both said device and said proxy, comprising:

- (a) broadcasting from a proxy separate from said device an interrogation in the form of a first control frame including a broadcast address;

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(b) receiving at said proxy a response from said device, said response being in the form of a second control frame identifying the device and including an invalid internet protocol address for said device;

(c) in response to said invalid internet protocol address, operating said proxy to request from said server a potential internet protocol address; obtain an allocated internet protocol address for said device; and

(d) in response to receipt of said potential internet protocol address from said server, to test said potential internet protocol addresses for conflict with existing protocol addresses, and obtaining an allocated internet protocol address when conflict thereof with existing addresses is absent; and

(e) sending from said proxy to said device a third control frame which includes said allocated internet protocol address.

Claim 8. (*Canceled*)

Claim 9. (*Currently Amended*) A method as in claim [[8]] 7, ~~further comprising operating said proxy to obtain said allocated internet protocol address for said device by means of a wherein said request is addressed to a said server according to a dynamic host communication protocol.~~

Claim 10. (*Currently Amended*) A method as in claim 9, wherein when said request is unsuccessful, operating said proxy to automatically allocating allocate an internet protocol address and testing such address for conflict with existing addresses.

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Claim 11. (*Currently Amended*) A method of allocating by a proxy an internet protocol address to a device connected to a packet-based communication network which includes a server separate from said proxy and in which devices connected to the network communicate by means of frames each including a media access control address and an internet protocol address, comprising:

(a) broadcasting from said proxy an interrogation in the form of a first control frame including a broadcast address;

(b) receiving at said proxy a response from said device, said response being in the form of a second control frame identifying the device and including an invalid internet protocol address for said device;

(c) in response to said invalid internet protocol address, operating said proxy to ~~obtain request~~ from said server an allocated internet protocol address for said device; and

(d) on receipt from said server of said allocated internet protocol address, sending from said proxy to said device a third control frame which includes said allocated internet protocol address.

Claim 12. (*Currently Amended*) A method as in claim 11 wherein said proxy ~~obtains requests~~ said allocated internet protocol address for said device by means of ~~a request addressed to said server according to~~ a dynamic host communication protocol.

Claim 13. (*New*) A method as in claim 11, further comprising, when said request is unsuccessful:

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(e) operating said proxy to test potential addresses to obtain a valid
internet protocol address and sending said third control frame with said valid internet
protocol address as said allocated internet protocol address to said device.
